

LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended): An image processing device, comprising:

an image dividing unit configured to divide an input image into a plurality of image sections;

an encoding unit configured to independently encode each of the image sections, and generate a first code stream including a plurality of code sections respectively corresponding to the image sections; and

an editing unit configured to edit one of the code sections in the first code stream, and to output ~~generate~~ a second code stream based on the edited code section,

wherein

the editing unit includes an index changing unit that changes an index indicating a position of one of the image sections from the first code stream and outputs the second code stream with the one of the image sections from the first image stream having the changed index.

2. (Currently Amended): The image processing device as claimed in claim 1, wherein

said editing unit comprises a deletion unit configured to delete at least one of the code sections from the first code stream and output the second code stream including the remaining code sections in the first code stream, and

the index changing unit changes an index indicating a position of the image section corresponding to the deleted code section so that the deleted code section remains in the second code stream but will not appear as a part of any reproduced image.

3. (Currently Amended): The image processing device as claimed in claim 1, wherein

said editing unit comprises an extraction unit configured to extract at least one of the code sections from the first code stream and output the second code stream including the extracted at least one code section, and

the index changing unit changes indexes indicating positions of the image sections corresponding to the un-extracted code sections so that the un-extracted code sections remain in the second code stream.

Claims 4-8 (Canceled).

9. (Currently amended): ~~The~~ An image processing device ~~as claimed in claim 8,~~
comprising:

an image dividing unit configured to divide an input image into a plurality of image sections;

an encoding unit configured to independently encode each of the image sections, and generate a first code stream including a plurality of code sections respectively corresponding to the image sections; and

an editing unit configured to edit one of the code sections in the first code stream, and to output a second code stream differing from the first code string based on the edited at least one code section, wherein

said editing unit ~~further~~ comprises:

a selection unit configured to select at least one of the code sections from the first code stream; and

a replacement unit configured to replace the selected code section with predetermined coded data, and to output the second code stream including the unselected code sections from the first code stream and the predetermined code data,

a decoding unit configured to decode the selected code section and generate first image data corresponding to the selected code section;

an image data generation unit configured to generate second image data based on the first image data;

a compression unit configured to encode the second image data and generate coded data, and to output the coded data to the replacement unit as the predetermined coded data;

a detection unit configured to determine a texture pixel value of the first image data output from the decoding unit; and

the image data generation unit assigns the determined texture pixel value to pixels of the first image data and outputs the pixel-value assigned first image data as the second image data.

Claims 10-12 (Canceled).

13. (Original): The image processing device as claimed in claim 1, wherein the encoding unit encodes each of the image sections by using one of entropy coding with two-dimensional discrete wavelet transformation and arithmetic coding.

14. (Currently amended): The image processing device as claimed in claim 1, wherein the encoding unit encodes each of the image sections by using JPEG-2000 an algorithm[[]] ~~and in which a height and a width of each of the image sections corresponds to a tile according to the JPEG-2000 algorithm~~ are multiples of a quantity $d = 2^L$, where L is a wavelet decomposition level.

15. (Canceled).

16. (Currently amended): An image forming apparatus, comprising:
an image reading unit configured to read an image on a manuscript;
an image processing device, comprising: an image dividing unit configured to divide an input image into a plurality of image sections;
an encoding unit configured to independently encode each of the image sections, and generate a first code stream including a plurality of code sections respectively corresponding to the image sections; and
an editing unit configured to edit one of the code sections in the first code stream, and generate to output a second code stream based on the edited code section[[]],

wherein
the editing unit includes an index changing unit that changes an index indicating a position of one of the image sections from the first code stream and outputs the second code stream with the one of the image sections from the first image stream having the changed index.

and

a printer engine configured to form an image on a sheet of paper based on the second code stream.

17. (Canceled).

18. (Currently amended): A computer readable storage medium or memory that stores a program executable by a computer for processing an input image, the program comprising the steps of:

dividing the input image into a plurality of image sections;

independently encoding each of the image sections, and generating a first code stream including a plurality of code sections respectively corresponding to the image sections; and

editing one of the code sections in the first code stream, and ~~generate~~ outputting a second code stream based on the edited code section,

wherein

the editing step includes an index changing step that changes an index indicating a position of one of the image sections from the first code stream and outputting the second code stream with the one of the image sections from the first image stream having the changed index.